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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/514,338	02/28/2000	Jun Tanabe	00724/P11-225315/AM/CUB/U	8391

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Wenderoth Lind and Ponack
2033 K street N.W.
SUITE 800
Washington, DC 20006

EXAMINER

KIM, CHONG HWA

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 02/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/514,338

Applicant(s)

TANABE ET AL.

Examiner

Chong H. Kim

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The Examiner acknowledges the Applicant's Amendment filed Jan 7, 2002 in response to the Office action made on Jul 6, 2001 and canceling of claims 1-14.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 15-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakada et al., U.S. Patent 5,792,302 in view of Nishibori, U.S. Patent 4,505,869, in view of Young, Jr. et al., U.S. Patent 3,802,291, in view of Cho, U.S. Patent 6,214,154 B1, and in view of Uchida, U.S. Patent 4,581,954.

Nakada et al. shows, in Figs. 1-5, a steering wheel comprising;

an annular rim 1a including;

a core 2;

arcuate rim elements 3, 4 mounted on the core 2;

a boss section (in the middle of the spoke section 1b) and a spoke section 1b, the annular rim section 1a being connected to the boss section by the spoke section 1b;

wherein the arcuate rim elements include a front-side rim element having a central longitudinal groove 13, and include a rear-side rim element having a central longitudinal groove

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13, the core 2 being fit into the central longitudinal groove 13 of each of the front-side rim element and the rear-side rim element so as to mount the rim elements 3, 4 on the core 2 (as shown in Figs. 3-6);

wherein the arcuate rim elements include an outer-side rim element having a central longitudinal groove 13, and include an inner-side rim element having a central longitudinal groove 13, the core 2 being fit into the central longitudinal groove 13 of each of the outer-side rim element and the inner-side rim element so as to mount the rim elements 3, 4 on the core 2 (as shown in Figs. 3-6);

a coating covering the arcuate rim elements 2, 4 (as described in column 9, lines 31-5);
and

wherein the annular rim section further includes a grip portion 25 formed of flexible urethane and mounted on the core 2 (as described in column 8, lines 56-61 and in column 7, lines 9-11);

but fails to show the rim elements being formed of thermosoftening synthetic material blended with woodmeal so as to form an annular streak pattern on an outer surface thereof and a color pigment blended therein to show different colors wherein the rim section has surface unevenness; a cover member mounted on the seam; the protective coating covering only the front-side portion of the arcuate rim element; a transfer print on a front-side of the annular rim section; and the arcuate rim elements having a first rim having a notch for receiving the core and a second rim having a substantially equal thickness to the diameter of the core to be fitted in the notch.

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As to the matter of the thermosoftening synthetic material blended with the woodmeal and the color pigment, Nishibori teaches, in column 1, lines 45-49, lines 61-65, a material that is made of a thermosoftening synthetic resin (thermoplastic resin) blended with woodmeal (or wood chips as mentioned in column 2, line 51) so as to form an annular streak pattern on an outer surface and wherein a color pigment is blended therein such that the annular streak pattern on the outer surface includes annular streaks of different color, as described in column 3, lines 56-58, and the surface has surface unevenness.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the steering wheel rim section made of wood of Nakada et al. with the material being made of thermosoftening synthetic resin including woodmeal and color pigment of Nishibori in order to provide a "surface characteristics identical with those of wood in actual use, color, touch, finish coating, adhesion, laminating, etc." when real wood is difficult to obtain and expensive so that the cost can be reduced and the availability can be increased.

As to the matter of the cover member mounted on the seam, Young, Jr. et al. shows, in Fig. 3, a steering wheel comprising a seam wherein a cover 106 is mounted on the seam.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the cover as taught by Young, Jr. et al. on the seam of Nakada et al. in order to provide a more pleasing design so that the value of the product is maintained.

As to the matter of the protective coating covering only the front-side portion of the arcuate rim element, it would have been obvious to modify protective coating of Nakada et al. by having the protective coating covering only the front-side portion of the arcuate rim element, since applicant has not disclosed that having the protective coating covering only the front-side

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portion of the arcuate rim element solves any stated problem or is for any particular purpose and it appears that the protective coating would perform equally well by covering other parts of the rim.

As to the matter of the transfer print on a front-side of the annular rim section, Cho discloses, in column 1, lines 30-47, a steering wheel comprising transfer print on a front-side of the annular rim section.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the rim of Nakada et al. with the transfer print of Cho in order to provide a more "accurate and clear match of pattern on a steering wheel" as described in column 1, lines 36-47, by Cho.

As to the matter of the arcuate rim elements having a first rim having a notch for receiving the core and a second rim having a substantially equal thickness to the diameter of the core to be fitted in the notch, Uchida shows, in Fig. 5, a steering wheel comprising an arcuate rim elements 10' include a first rim element 11 having a longitudinal notch formed therein for receiving the core 7, and a second rim element 114 having a thickness (near the core 7) substantially equal to a diameter of the core 7 and being fitted into the notch of the first rim element 11 after the core.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the two halves of Nakada et al. with the cover assembly of Uchida in order to provide a more securely engaged mechanism so that the steering wheel would last longer.

Response to Arguments

3. Applicant's arguments with respect to the Zeller reference have been considered but are moot in view of the new ground(s) of rejection.

4. In response to applicant's argument that Nishibori "does not disclose or suggest the rim elements are formed of thermosoftening synthetic resin material blended with woodmeal so as to form an annular streak pattern on an outer surface of each of the rim elements", it is noted above that Nishibori teaches, in column 1, lines 45-49, lines 61-65, a material that is made of a thermosoftening synthetic resin (thermoplastic resin as disclosed by Nishibori is thermosoftening synthetic resin) blended with woodmeal (or wood chips as mentioned in column 2, line 51) so as to form an annular streak pattern on an outer surface and wherein a color pigment is blended therein such that the annular streak pattern on the outer surface includes annular streaks of different color, as described in column 3, lines 56-58. Nishibori further describes that the molded product is provided with "surface characteristics identical with those of wood in actual use, color, touch, finish coating, adhesion, laminating, etc." From above disclosure, it is suggested to one of ordinary skill in the art that the molded product has the annular streak pattern on the outer surface to resemble wood. The natural wood possesses the characteristics having streaks of different colors and unevenness on the surface due to the wood fibers. Therefore, if Nishibori discloses that the molded product has the characteristics **identical** with those of wood in actual use, color, touch, etc, then it is inherent that the molded product must possess the characteristics having the streaks having different colors.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Steering wheel having multiple rim sections for receiving core member.

Futschik et al., U.S. Patent 6,012,354

Endo et al., JP Patent 63176772 A

Iuchi, U.S. Patent 4,800,775

Product related to transfer printing method.

Manabe et al., JP Patent 58191187 A

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

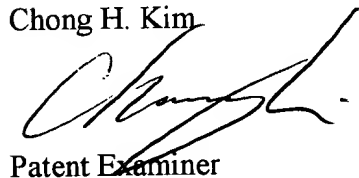
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chong H. Kim whose telephone number is (703) 305-0922. The examiner can normally be reached on Monday - Friday; 9:00 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on (703) 308-3668. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Chong H. Kim



Patent Examiner

February 5, 2002